

WHAT IS CLAIMED IS:

Sub
All

1. A portable memory device for a USB-supporting data processing system, the memory device comprising:

a USB connector for being connected to a USB port of the data processing system;

an integrated circuit memory for writing/reading data; and

a USB interface coupled between the USB connector and the memory, for interfacing the memory with the data processing system.

2. The memory device of Claim 1, wherein the memory is a nonvolatile semiconductor memory.

3. The memory device of Claim 1, wherein the data processing system comprises a computer, a digital camera, a digital video camera, and an electronic calculator.

4. The memory device of Claim 1, wherein the memory device is worked as a portable memory device of the data processing system.

5. The memory device of Claim 1, wherein the memory device supports a plug and play function, and the USB connector is capable of being connected and separated to/from the USB port of the data processing system while the data processing system is powered on.

1 6. The memory device of Claim 1, wherein the memory device stores a security
2 information.

1 7. The memory device of Claim 6, wherein the data processing system stores a security
2 information to verify an authorized user.

1 8. The memory device of Claim 7, wherein the data processing system starts to work
2 when the security information of the memory device is matched with the security information of the
3 data processing system.

1 9. The memory device of Claim 1, wherein the housing comprises a hole for holding a
2 key ring.

1 10. The memory device of Claim 1, wherein the memory device comprises a connector
2 cover for protecting the USB connector from damage.

1 11. The device of claim 1, said device further comprising a housing for accommodating the
2 memory and the USB interface.

1 12. A method of expanding memory for a host computer, comprising the steps of:

2 applying power to said host computer;
3 inserting a portable memory device into a universal serial bus (USB) port of said host
4 computer;
5 recognizing said portable memory device by said host computer; and
6 performing reading and writing operations to said portable memory attached to said host
7 computer.

1 13. The method of claim 12, further comprising the step of performing a power on self test
2 upon applying power to said host computer.

1 14. The method of claim 12, further comprising the step of booting said host computer by
2 an operating system.

1 15. The method of claim 12, further comprising the step of automatically sliding a protective
2 cover backwards upon insertion of said portable memory device into said USB port exposing a USB
3 connector of said portable memory.

1 16. A method for securing data on a hard disk of a host computer, comprising the steps of:
2 applying power to said host computer;
3 determining if a universal serial bus (USB) device is connected to said host computer;
4 comparing security information in said host computer with security information in said USB

5 device; and

6 enabling a hard disk drive of said host computer if said security information in said USB
7 device matches said security information in said host computer.

1 17. The method of claim 16, further comprising the step of performing a power on self test
2 when power is applied to said host computer.

1 18. The method of claim 16, further comprising the step of booting said host computer by
2 an operating system after enabling said hard disk drive.

1 19. The method of claim 16, further comprising the step of displaying an error message if
2 said USB device is not connected to said host computer.

1 20. The method of claim 16, further comprising the step of displaying an error message if
2 said security information in said host computer does not match said security information in said USB
3 device.